M/047/013

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155
http://www.blm.gov

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
3590
UTU-0122693
(UT-923)

CERTIFIED MAIL--Return Receipt Requested

Mr. Stan Wagner
Ziegler Chemical and Mineral Corporation
Star Route
Vernal Utah, 84078

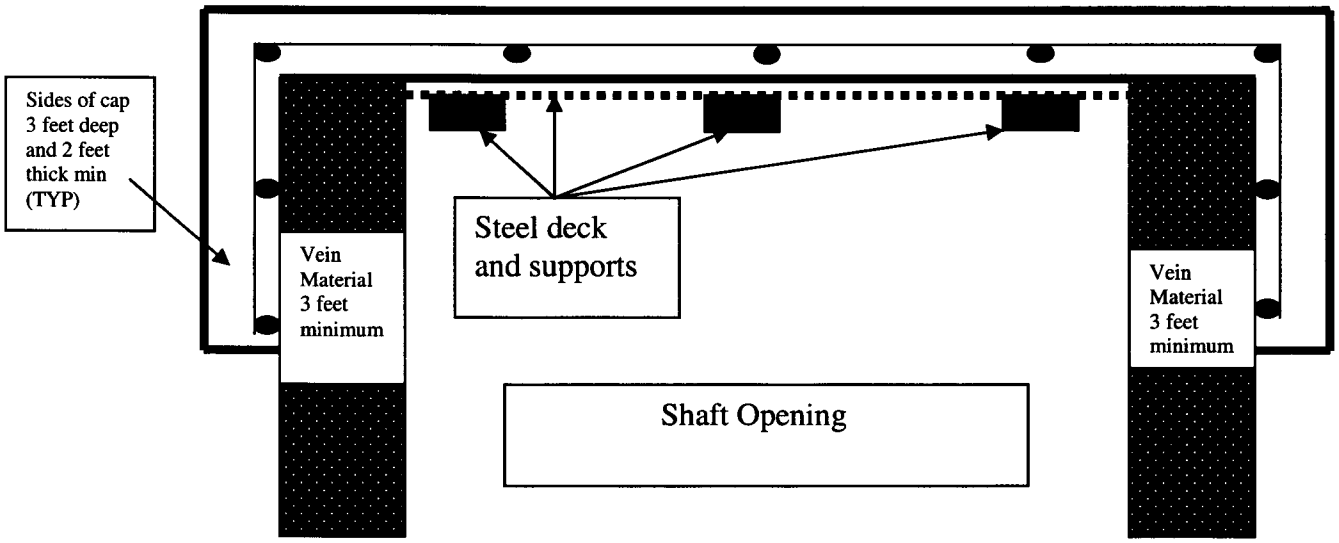
Re: Reclamation Issues for Federal Gilsonite Lease UTU-0122693

The Bureau of Land Management (BLM) inspected the Cowboy-Bandana mine site (fig 1.) on April 7, 2005 and has some concerns with the condition of the shaft. BLM was told by representatives of Ziegler that the shaft has been filled with broken concrete material. BLM notes that signs have been placed on the site to warn people of the open shaft. BLM requires the shaft be closed immediately to remove any liabilities that would be associated with the shaft.

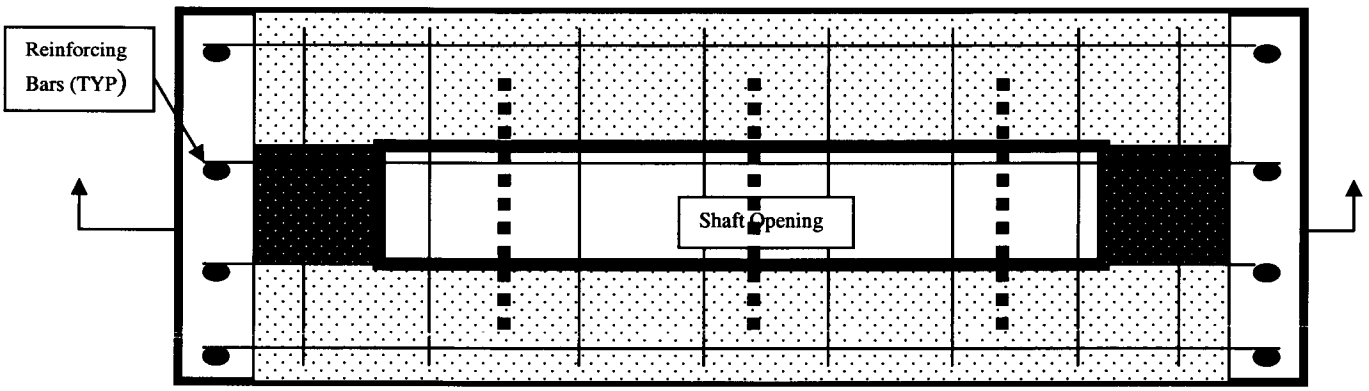
BLM recommends that the shafts be filled with non combustible material. If there is insufficient material available, then the shafts should be capped. The caps must be sealed in non-weathered ground material. On the sides, the caps must overlap the vein at least 2 feet or the width of the vein which ever is greater. On the strike of the vein the cap must over lap the shaft opening at least 3 feet. The caps must be constructed of reinforced concrete. The cap must extend down into the vein at least 3 feet. This will be at the cap end. Steel supports are recommended for supporting the forming of the caps. The top of the caps must be at least 2 feet below ground surface (See Drawing 1). The caps must be covered with a water proofing material prior to placing soil over the top of the cap. All material in the shafts should be removed such as vent pipes and upper ladders etc. The areas around the caps should be fenced to ensure that people and animals are kept away from the shaft site.

BLM will require inspecting the site and approve the forming and construction prior to pouring of the cap.

Conceptual Shaft Cap Cross Section for veins < 3 feet wide – Not To Scale



Conceptual Shaft Cap Plan View – Not To Scale



NOTES: (Dimensions assume competent material)

1. 4000 to 5000 psi concrete
2. Pipe can be used in place of steel supports.
3. Supports are to be hitched into the rib walls.
4. Cap Thickness minimum of 2 feet.
5. Reinforcing bars should be #6 tied on 2 foot centers going both ways as a minimum.
6. Reinforcing steel in sides should tie into the cap.
7. Water proofing material on the exterior of the top of the cap. Top of the cap should be slightly rounded.
8. Minimum width of the cap is 2 feet on each side of the vein or the width of the vein which ever is greater.

Drawing 1

Figure 1 Cowboy Bandana Shaft 04/07/2005

In addition, the cap on the east escapeway (fig. 2) has been removed because the water going down the drainage was undercutting the cap. BLM recommends that the small drainage be moved to the approximate location shown by the large heavy arrow in the picture below.

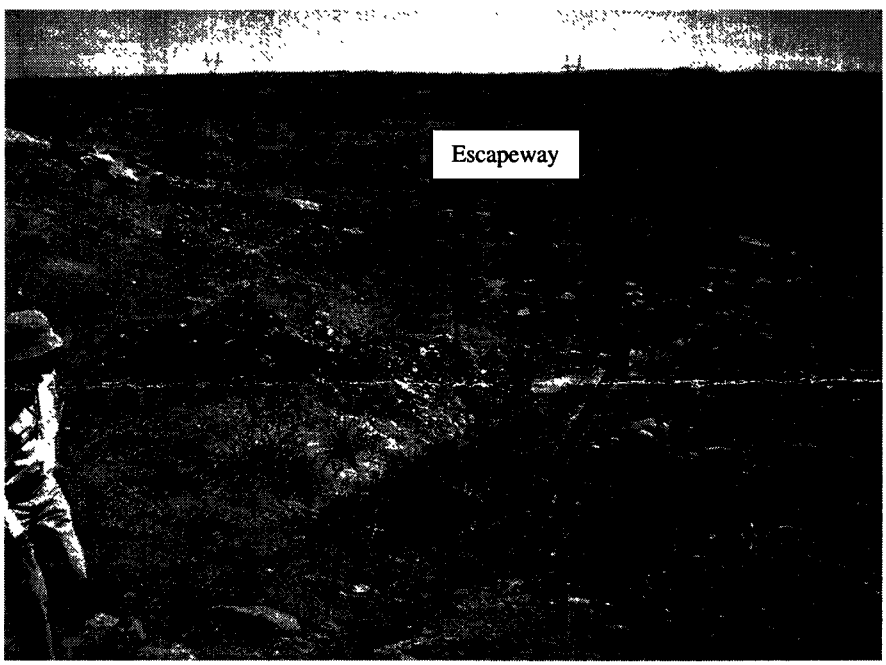


Figure 2 East Escapeway Cowboy Bandana mine

BLM feels that this would be the best solution to this problem. The gilsonite material should be placed in the escapeway and this area should be left higher than the other areas. There should be a berm of large competent material should be to maintain the drainage away from the escapeway.

If you have any questions please contact Mr. Stan Perkes at 801-539-4036.

Sincerely,

JAMES F KOHLER

James F. Kohler
Chief, Solid minerals Branch

cc: VFO

Paul Baker, Utah Division of Oil, Gas and Mining, P.O. Box 145801, Salt Lake City, Utah 84114-5801

Mr. Gordon Ziegler, Ziegler Mineral and Chemical Corp, 366 North Broadway, Suite 210, Jerico, New York 11753